

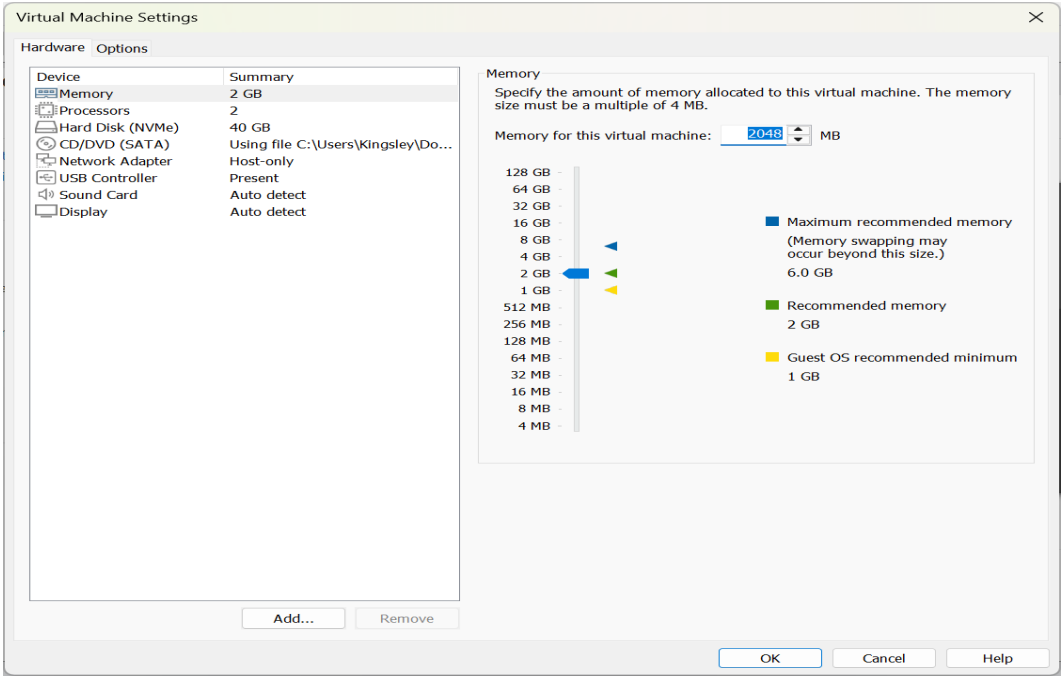
# Active Directory Homelab Portfolio

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This portfolio documents my hands-on implementation of an Active Directory (AD) homelab. The environment was deployed using VMware Workstation and configured as a Windows Server 2022 Domain Controller. It demonstrates essential AD administration tasks, automation with PowerShell, and security configurations.

## VM Setup & Configuration

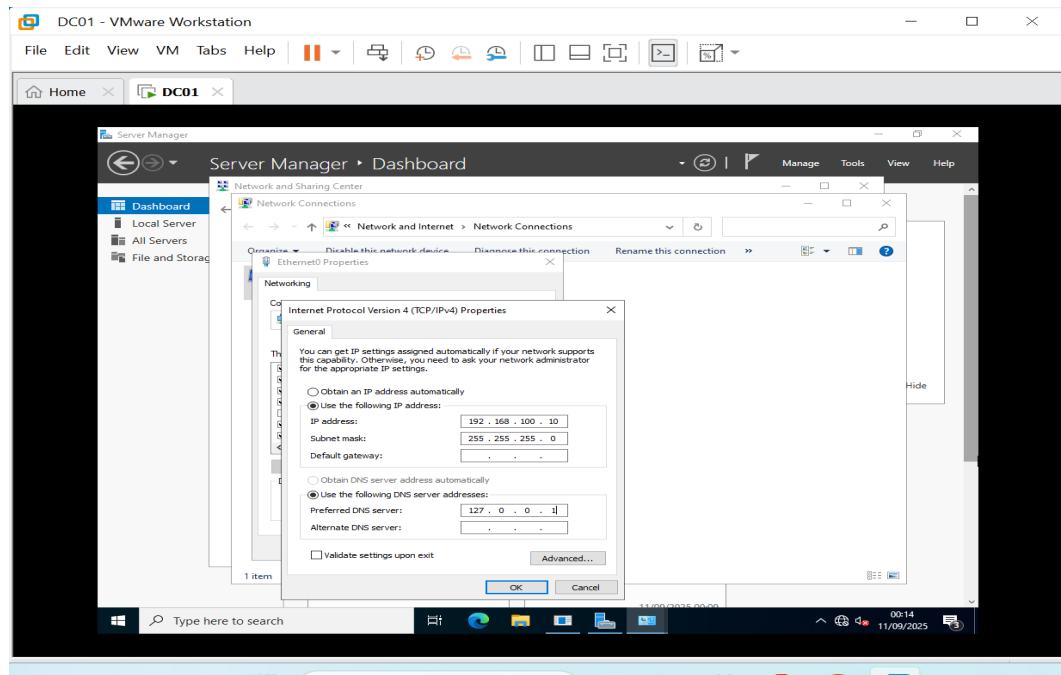
Virtual machine setup including memory, CPU, and storage allocation.



VM Settings Summary

# Static IP Configuration

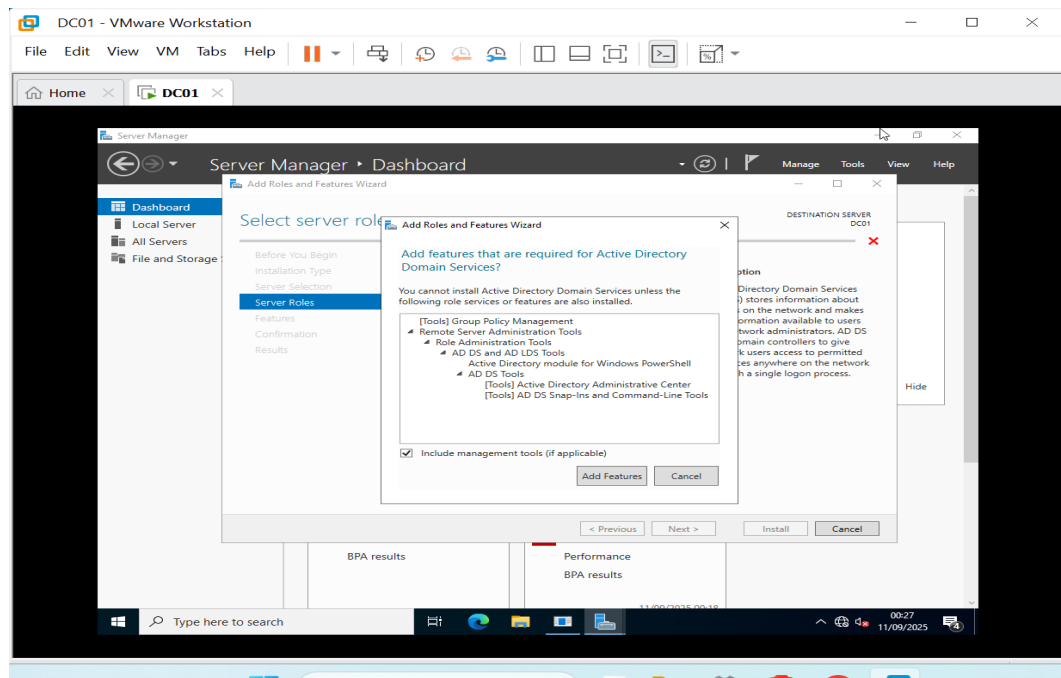
Configured static IP and DNS settings for reliable domain resolution.



Static IP Configuration

# Active Directory Installation

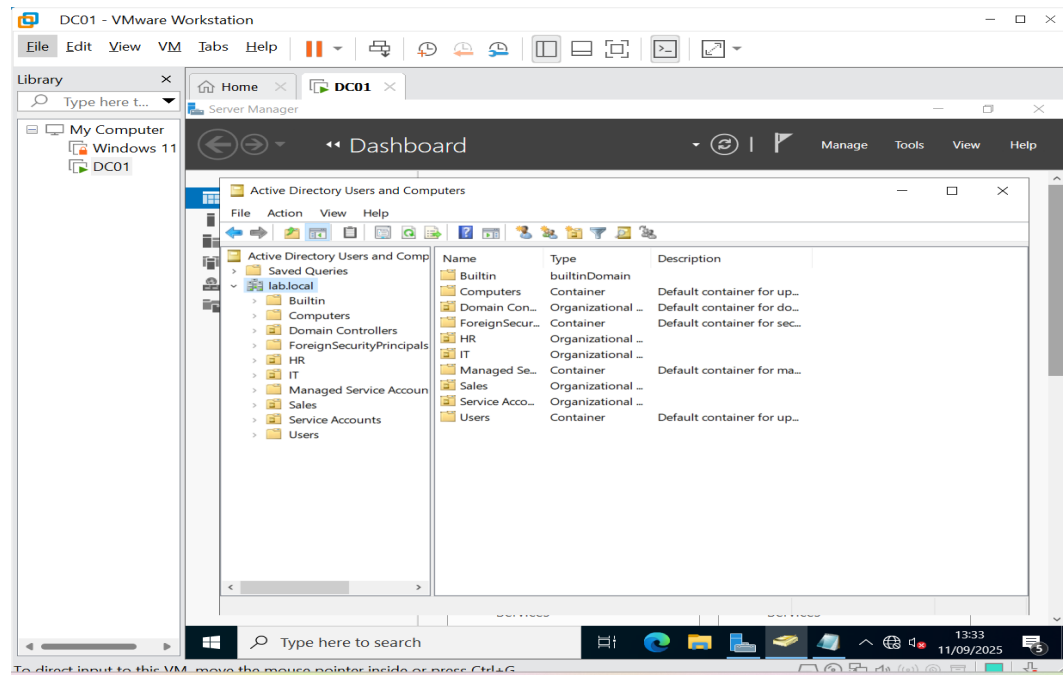
Installed Active Directory Domain Services (AD DS) and promoted the server to a Domain Controller.



Active Directory Installation

# Organizational Unit (OU) Structure

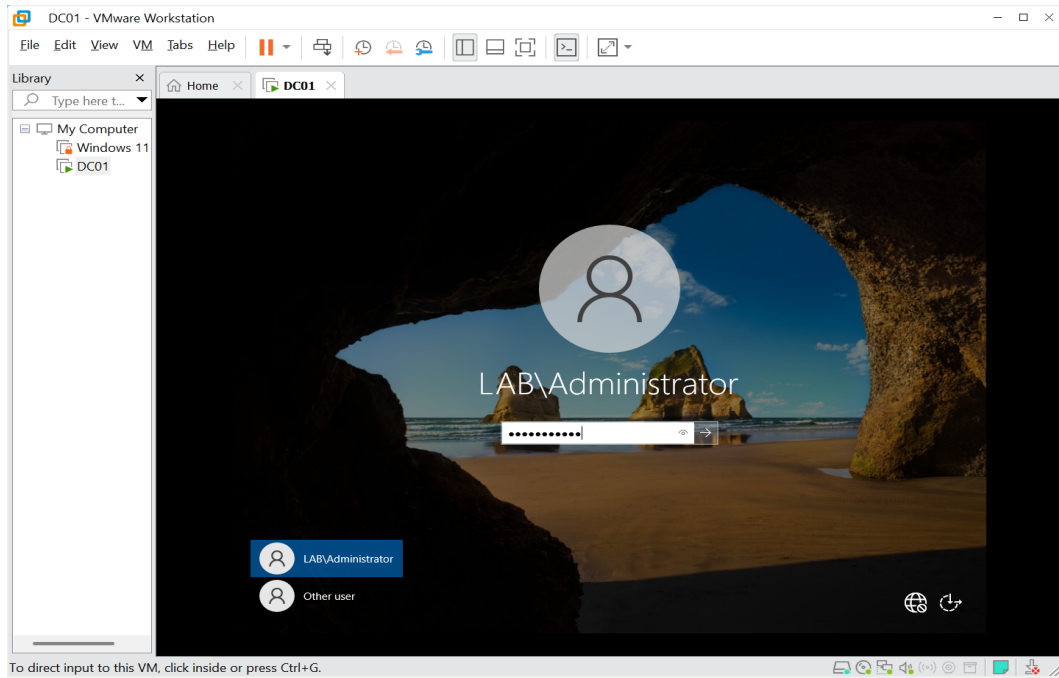
Designed a structured OU hierarchy for HR, IT, and Sales departments.



*OU Structure*

# Active Directory Users & Computers

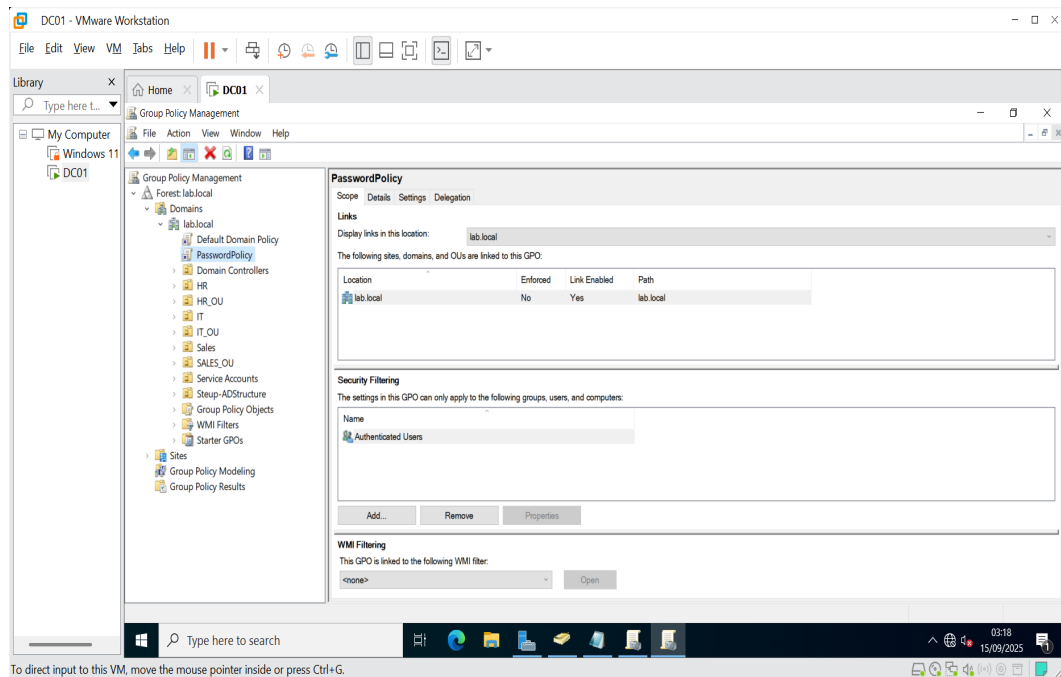
Created and managed users and groups via ADUC.



*Active Directory Users & Computers*

# Group Policy (GPO) Configuration

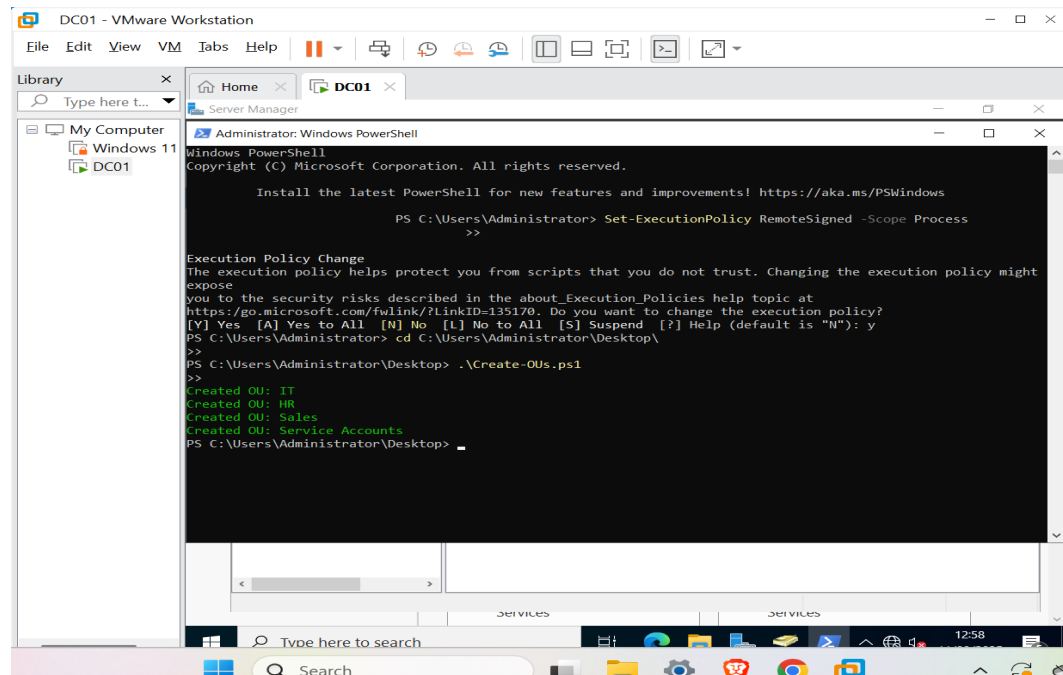
Implemented password policies and security baselines using Group Policy Management.



*GPO Password Policy*

# PowerShell Automation

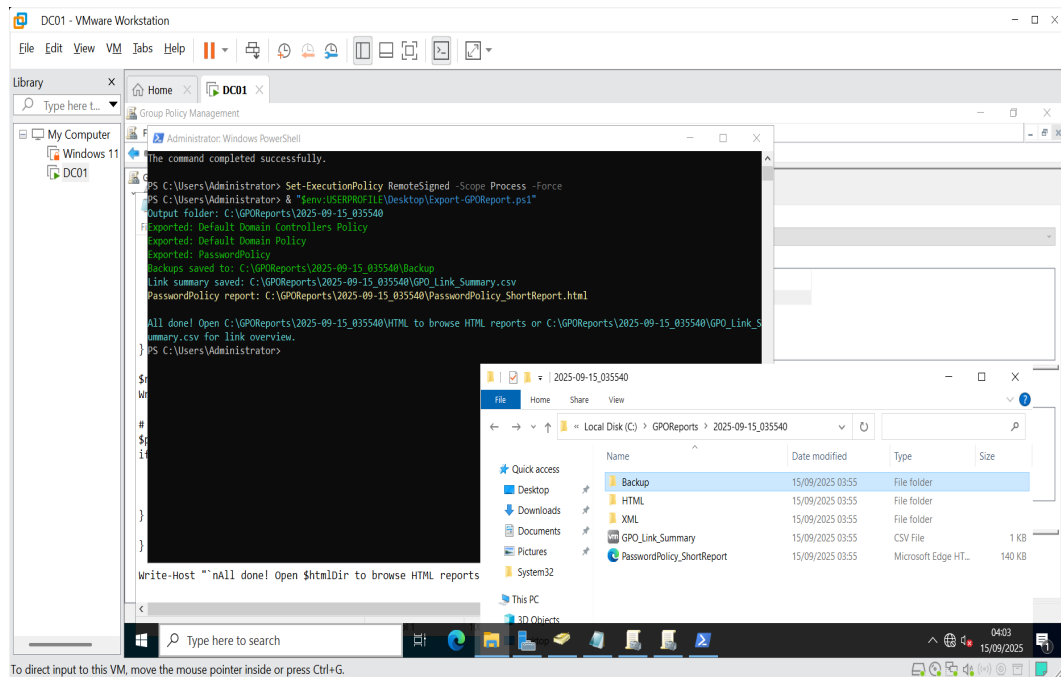
Automated OU and user creation with PowerShell scripts.



*PowerShell OU Automation*

## Backup & Reporting

Exported GPOs and generated reports to validate configuration and for disaster recovery.



*Backup & GPO Report*